



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

SW

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/763,892

01/23/2004

Mark A. McLean

031890-1751

7768

27433

7590

09/17/2004

FOLEY & LARDNER

321 NORTH CLARK STREET

SUITE 2800

CHICAGO, IL 60610-4764

EXAMINER

ALIE, GHASSEM

ART UNIT

PAPER NUMBER

3724

DATE MAILED: 09/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/763,892	Applicant(s) MCLEAN ET AL. CN	
	Examiner Ghassem Alie	Art Unit 3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on the filing date of the application.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>01/23/04&07/26/04</u> . | 6) <input type="checkbox"/> Other: _____ |

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "14", page 5 of the specification.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: "57" in Fig. 6.

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 3724

4. Claims 1, 2, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Cornell et al. (5,802,942), hereinafter Cornell. Regarding claim 1, Cornell teaches a material cutting device 10 including a board 12 upon which a material is to be cut and the board includes a first surface upon which material is placed. Cornell also teaches a rail member 6 operatively and rotatably connected to the board 12. Cornell also teaches a cartridge assembly 16, 18 slidably engaging the rail member 60 and slidable along a cutting axis 32 along the board 12. The blade assembly 16 and carrier 18 define the cartridge assembly. Cornell also teaches that the cartridge assembly includes a sleigh 18 in slidable engagement with the rail member 60. Cornell also teaches a cartridge 16 removably connected to the sleigh and the cartridge 16 being removable from the sleigh 18 without the use of tools. Cornell also teaches a cutting element 100 removably engaging the cartridge 16 wherein a cutting surface 102 of the cutting element 100 aligns with the cutting axis 32 of the board 12. See Figs. 1-11 and col. 3 and 4, lines 1-66 in Cornell.

Regarding claim 2, Cornell teaches everything noted above including that the cartridge 16 snap fits with the sleigh 18. See Figs. 3-5 in Cornell.

Regarding claim 11, Cornell teaches everything noted above including a plurality of hinge members 76, 78 rotatably coupling the rail member 14 to the cutting board 12. See Figs. 1 and 2 in Cornell.

5. Claims 1, 2, 11, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Baba (5,322,001). Regarding claim 1, Baba teaches a material cutting device 10 including a board 12 upon which a material is to be cut and the board includes a first surface upon which material is placed. Baba also teaches a rail member 14 operatively and rotatably connected to

Art Unit: 3724

the board 12. Baba also teaches a cartridge assembly 16 slidably engaging the rail member 14 and slidable along a cutting axis along the board 12. Baba also teaches that the cartridge assembly 16 includes a sleigh 34 in slidable engagement with the rail member 14. Baba also teaches a cartridge 36 removably connected to the sleigh 34 and the cartridge 36 being removable from the sleigh 34 without the use of tools. Baba also teaches a cutting element 18 removably engaging the cartridge 36 wherein a cutting surface of the cutting element 18 aligns with the cutting axis of the board 12. See Figs. 1-7 and col. 2, lines 51-68 and col. 3, lines 1-66 in Baba.

Regarding claim 2, Baba teaches everything noted above including that the cartridge 36 snap fits with the sleigh 34. See Figs. 5-7 in Baba.

Regarding claim 11, Baba teaches everything noted above including a plurality of hinge members 26 rotatably coupling the rail member 14 to the cutting board 12. See Fig. 1 in Baba.

Regarding claim 12, Baba teaches everything noted above including a cutting mat 23 positioned within the board 12 along the cutting axis. See 1-4 Baba.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baba or Cornell in view of DuBois (4,515,053). Regarding claim 3, Baba teaches everything noted

Art Unit: 3724

above including that the cartridge 36 includes a cartridge casing 55 and an axel 64 fixedly secured to the cutting element 18. See Figs. 5-7 in Baba. Regarding claim 3, Cornell also teaches everything noted above including that the cartridge 16 has a cartridge casing 112, 114 and an axel 126 fixedly secured to the cutting element 100. See Figs. 3-4 in Cornell. Baba or Cornell does not teach a coupling member positioned between the axle and the cartridge casing and the coupling member acting against the axel to align the cutting element against the rail member. However, the use of coupling member to act against the axel of a blade for keeping the blade align with a cutting axis is well known in the art such as taught by DuBois. DuBois teaches a coupling member 58 which is located between a casing of the knife assembly 36 and a shaft 49 for acting against the axel 49 to align the cutting element against the rail member 38. See Fig. 3 and col. 3, lines 46-68 in DuBois. It would have been obvious to a person of ordinary skill in the art to provide the cartridge of Baba's or Cornell's cutting device with the coupling member as taught by DuBois in order to keep the cutting element align with the wall of the rail member or the support edge of the rail member.

8. Claims 1, 2, 13, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weber (802,720) in view of Baba. Regarding claims 1 and 13, Weber teaches a material cutting device including a rail member f, a cartridge assembly a, d slidably engaged with the rail member f along a cutting axis. The main frame and the gage d define the cartridge assembly. Weber also teaches a sleigh d in slidable engagement with the rail member f and a cartridge a removably connected to the sleigh d and the cartridge a being removably from the sleigh d. Weber also teaches a cutting element b removably engaging the cartridge a wherein a cutting surface of the cutting element aligns with the cutting axis. See Figs. 1-4 and page 1,

Art Unit: 3724

lines 1-100 in Weber. Weber does not teach a board upon which a material is to be cut and that rail member operatively and rotatably connected to the board. Baba teaches a board 12 upon which a material is to be cut and a rail assembly 14 which is rotatably connected to the board 12. See Figs. 1-4 in Baba. It would have been obvious to a person of ordinary skill in the art to provide Weber's cutting device with the board and rotatable connection of the rail assembly with respect to the board as taught by Baba in order to support and hold the material to be cut on a surface and facilitate the cutting operations. Weber also does not teach that the cartridge being removably from the sleigh without the use of tools. However, Official notice is taken that the use of screw that can be tight or untight by hand is well known in the art such as it evident by Korors et al. (5,795,291), Gold (5,490,331), Denham (4,446,760), or Green et al. (2,735,468). It would have been obvious to a person of ordinary skill in the art to provide a screw for Weber's cutting device that can be tight or untight by hand in order to facilitate the replacement of the cutting element.

Regarding claim 2, Weber as modified by Baba teaches everything noted above except that the cartridge snap fits the sleigh. However, Official notice is taken that the use of snap fit rod and within a cab or lid is well known in the art and the Weber's screw can be replace by this type of fastener that facilitate the disengagement of the sleigh and the cartridge from one another.

Regarding claim 20, Weber as modified by above teaches everything noted above including an upper casing member removably connected to the sleigh and d and being removable from the sleigh without the use of tools. The upper casing is defined by the top portion of the frame a wherein the spring e is positioned underneath of it. Weber also teaches

Art Unit: 3724

a side casing member operatively connected to the upper casing. The element vertical side of the frame, which holds the arbor C2, defines the side casing member. Weber also teaches means C2 for securing the cutting element b between the upper and side casing elements. See Figs. 1-5 in Weber.

9. Claim 3-5, 14-17, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weber in view of Baba, as modified above, and in further view of DuBois. Regarding claims 3, 14, and 21, Weber as teaches everything noted above including that the cartridge a includes a cartridge casing and an axel C2 fixedly secured to the cutting element b. See Figs. 1-5 in Weber. Weber as modified by Baba does not teach a coupling member positioned between the axle and the cartridge casing and the coupling member acting against the axel to align the cutting element against the rail member. However, the use of coupling member to act against the axel of a blade for keeping the blade align with a cutting axis is well known in the art such as taught by DuBois. DuBois teaches a coupling member 58 which is located between a casing of the knife assembly 36 and a shaft 49 for acting against the axel 49 to align the cutting element against the rail member 38. See Fig. 3 and col. 3, lines 46-68 in DuBois. It would have been obvious to a person of ordinary skill in the art to provide the cartridge of Weber's cutting device with a coupling member as taught by DuBois in order to keep the cutting element align with the wall of the rail member or the support edge of the rail member.

Regarding claims 4, 5, and 16, Weber teaches everything noted above including that the cartridge a includes a biasing member e operatively connected to the cartridge casing and

Art Unit: 3724

the biasing member e basing the cartridge away from the sleigh d. Weber also teaches that the biasing member e is a leaf spring. See Figs. 1-5 in Weber.

Regarding claim 15, Weber as modified above teaches everything noted above except that the cartridge snap fits the sleigh. However, Official notice is taken that the use of snap fit rod and within a cab or lid is well known in the art and the Weber's screw can be replace by this type of fastener that facilitate the disengagement of the sleigh and the cartridge from one another.

Regarding claim 17, Baba teaches everything noted above including a cutting mat 23 positioned within the board 12 along the cutting axis. See 1-4 Baba.

10. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baba in view of Schulz (2003/0140761) or Chan et al. (Des. 412,931), hereinafter Chan. Regarding claim 5, Baba teaches everything noted above except that the cutting device further includes a first measuring arm rotatably and operatively connected to the board and the first measuring arm rotatable about an axis substantially perpendicular to the cutting axis. However the use of measuring arm which is rotatable is well known in the art such as taught by Schulz or Chan. Schulz teaches a first measuring arm 200 operatively connected to a board 12 and the first measuring arm 200 is rotatable about an axis substantially perpendicular to the cutting axis. See Figs. 12 and 13 in Schulz. Chan also teaches a first measuring arm operatively connected to a board and the first measuring arm is rotatable about an axis substantially perpendicular to the cutting axis. See Figs. 1-7 in Chan. It would have been obvious to a person of ordinary skill in the art or provide Baba's cutting device

Art Unit: 3724

with the measuring arm as taught by Schulz or Chan in to support the material and align the material to the cutter.

Regarding claim 7, Baba as modified by Schulz teaches everything noted above including that the first measuring arm 200 includes a first surface that is substantially coplanar with the first surface of the board. See Figs. 12 and 13 in Schulz.

11. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baba in view of Schulz, as applied to claim 6, and in further view of Price (4,341,247). Regarding claim 8, Baba as modified by Schulz teaches everything noted above except a second measuring arm rotatably and operatively connected to the board. However, the use of two measuring arms is well known in the art such as taught by Price. Price teaches a cutting device including a board 30 having two measuring arms 45 which are connected to both sides of the board 30. See Fig. 1 and col. 9, lines 36-68 and col. 10, lines 1-62 in Price. It would have been obvious to a person of ordinary skill in the art to provide Baba's cutting device, as modified by Schulz with a second measuring arms just like the first one, as taught by Price, in order to support larger materials and align larger material to the cutter.

12. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baba in view of Szabo (3,532,018). Regarding claim 9, Baba teaches everything noted above except a material clamp removably and operatively connected to the board wherein the material is secured between the board and the material clamp. Szabo teaches a material clamp 21 removably and operatively connected to the board 2 wherein the material is secured between the board and the material clamp 21. See Figs. 1-5 and col.2, lines 14-55 in Szabo. It would have been obvious to a person of ordinary skill in the art to provide Baba's cutting

Art Unit: 3724

device with the material clamp as taught by Szabo in order to hold the material against the surface of the board and facilitate the cutting of the material.

Regarding claim 10, Baba as modified by Szabo teaches everything noted above including that the material clamp has a first and second end and elongated portion and the first and second ends include securing means 20 for removably securing the material clamp to the board 2. See Figs. 1-5 in Szabo.

13. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baba in view of DuBois, as applied to claim 14, and in further view of Szabo. Regarding claim 18, Baba as modified by DuBois teaches everything noted above except a material clamp removably and operatively connected to the board wherein the material is secured between the board and the material clamp. Szabo teaches a material clamp 21 removably and operatively connected to the board 2 wherein the material is secured between the board and the material clamp 21. See Figs. 1-5 and col.2, lines 14-55 in Szabo. It would have been obvious to a person of ordinary skill in the art to provide Baba's cutting device, as modified by DuBois, with the material clamp as taught by Szabo in order to hold the material against the surface of the board and facilitate the cutting of the material.

Regarding claim 19, Baba as modified by above teaches everything noted above including that the material clamp has a first and second end and elongated portion and the first and second ends include securing means 20 for removably securing the material clamp to the board 2. See Figs. 1-5 in Szabo.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Daley (6,098,515), Baba (5,619,898), Castronovo (6,334,582), Gadbois (6,595,835), 5,524,515), Cornell et al. (5,996,459), Carlson et al. (2003/0140757), Hatsumi et al. (Des. 319,840), Mori (5,069,097), Komatsu (5,042,349), Mori et al. (6,782,785), Hasiao (6,460,443), and Koztrski et al. (4,871,156) teach a material cutting device including a rail member, a board, and a cartridge assembly.

Korors et al. (5,795,291), Gold (5,490,331), Denham (4,446,760), and Green et al. (2,735,468) teach a fastener that is tight by hand.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ghassem Alie whose telephone number is (703) 305-4981. The examiner can normally be reached on Mon-Fri 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan Shoap can be reached on (703) 305-1082. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9302 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.


Application/Control Number: 10/763,892

Page 12

Art Unit: 3724

GA/ga

September 8, 2004


Allan N. Shoap
Supervisory Patent Examiner
Group 3700